LAND MANAGEMENT FOR BOBWHITE QUAIL IN ALABAMA

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
AUBURN, ALABAMA

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The bobwhite quail is common throughout Alabama. Its abundance is determined primarily by land management. This booklet describes land management practices that are beneficial to quail.

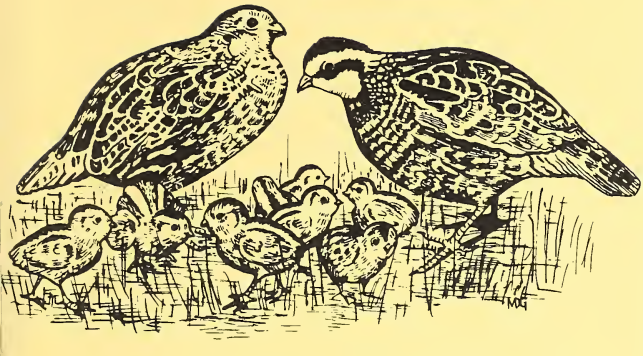
LIFE HISTORY

Pairing off usually occurs in April. Pairs remain mated throughout nesting season. Nesting season is May through August, with a rare nest as late as October. Peak of nesting is usually May and early June. If no chicks are hatched from the first nest, pairs attempt a second, a third, or even a fourth nest. Average number of eggs per clutch is about 14.

Incubation period is 23 days. The hen usually incubates the eggs, but incubation may be performed by the cock. Chicks are capable of short flights at 2 weeks of age (about size of tailless house sparrow).

Quail are grown in size at 14 to 16 weeks of age. The young may remain in the family group with their parents, or they may join quail from other hatchings to form the fall and winter coveys. Coveys break up in April when the members pair off for breeding.

Drawings on the cover and on pages 4 and 5 are by courtesy of the Florida Game and Fresh Water Fish Commission.



Quail family feeding in thin vegetation

Potential life span is about 8 to 10 years, but few reach that age. Average life expectancy is less than 1 year. About 80 percent of the fall population are young birds that were hatched earlier in the same year.

PLACE IN SOIL AND WATER CONSERVATION

Suitable quail habitat can be retained or created and maintained on cropland, hayland, pastureland, wildlife land, or woodland. Lands managed for quail should be protected from erosion and made to produce high quality food and cover.

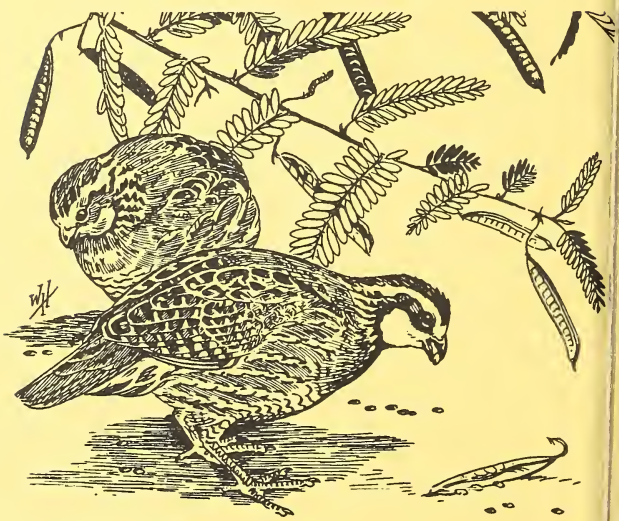
HABITAT NEEDS

Food - The bobwhite's diet consists mostly of seeds, fruits, insects, and small amounts of green matter, Choice

natural foods are acorns, annual lespedeza, blackberry, butterfly peas, common ragweed, dewberry, Florida beggarweed, milkpeas, mulberry, panicgrasses, partridge peas, pines (all species), sweetgum, and tickclover (beggarlice).

Choice agricultural foods are browntop millet, corn, cowpeas, grain sorghum, Japanese millet, lespedezas (annual, bicolor), and wheat. Foods must be located near suitable quail cover; if not, they will be of little value.

Cover - The bobwhite thrives best where about equal amounts of cultivated crops; idle fields that have been out of cultivation from 3 to 10 years; and woodland (especially cut-over woodland and areas reverting to woodland) are found in small, well-scattered fields.



Partridge peas -- good food for quail

Cover should provide nesting areas, loafing areas, roosting areas, and concealment from natural enemies. A major portion of the cover should be open enough that quail can walk freely through it. Cover should be located near a year-round supply of quail foods, especially choice winter foods.

Typical roosting circle

Water - The bobwhite drinks when water is available, but drinking water is usually not essential. Apparently dew, succulent vegetation, insects, and other moist foods provide the necessary moisture.

HABITAT MANAGEMENT

Habitat management consists mostly of retaining, creating, and maintaining suitable cover and food.

Retaining Habitat

Cover - Retain thickets, briarpatches, Japanese honeysuckle, weeds, grasses, brush, broomsedge, idle crop fields, wooded areas, ditchbanks, fencerows, or other natural quail cover. One acre of such cover for every 12 acres usually supports high quail populations.

Food - Retain annual lespedezas, butterfly peas, common ragweed, Florida beggarweed, milkpeas, partridge peas, tickclover (beggarlice), and other quail foods. One acre of such food for every 12 acres usually supports high quail populations.

Creating Habitat

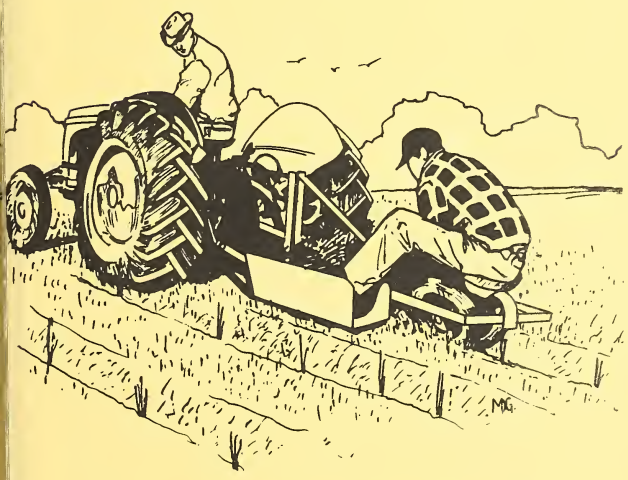
Planting cover - Plant sericea, wild plum, or privet. Plant sericea in strips 15 to 20 feet wide and 1/8 to 1/4 acre in size. A 1/8 acre strip of sericea is especially recommended adjacent to bicolor plots. Plant wild plum and privet in clumps 20 feet or more in diameter. Plant near suitable quail food.

Creating woodland openings - Openings should be 1 acre or more in size, preferably square in shape. One opening (1 acre or more) for every 12 acres of woodland is usually sufficient for quail, especially in rather open, uneven-aged woodland.

Creating natural quail cover - On openland, allow natural plant succession

to vegetate 1/2 acre or more. Such vegetated areas should be well distributed and located near suitable quail food.

Planting food plots - Plant food plots to bicolor, browntop millet, Clanton tickclover, common lespedeza, corn, cowpeas (combine and hard-seeded varieties are recommended), dove proso, Florida beggarweed (South Alabama), Kobe lespedeza, Korean lespedeza (North Alabama), partridge peas, vetch or wild reseeding soybeans. Florida beggarweed should be interplanted with a row crop, preferably corn.



Planting bicolor with tree planter

Plots should be at least 15 feet wide. All except bicolor should be 1/4 acre or more in size.

For ease of hunting, bicolor plots should be no wider than 15 to 20 feet and no larger than 1/8 acre. When planting bicolor, it is usually best to plant 1/8 acre to bicolor and an adjoining 1/8 acre to one of the other recommended quail food crops. A 1/8-acre strip of sericea adjacent to the 1/8 acre of bicolor is also recommended, especially if suitable quail cover is scarce. One food plot for each 12 acres usually supports high quail populations.

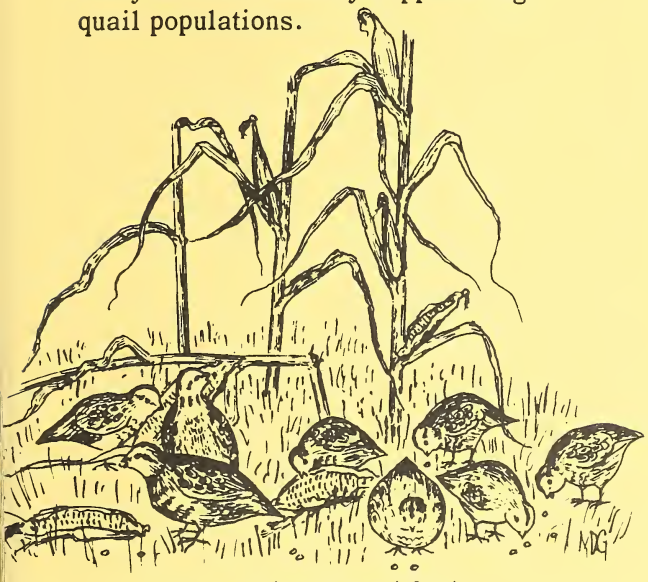
Leaving agricultural crops unharvested - Leave 1/4 acre or more of browntop millet, corn, cowpeas, grain sorghum, Japanese millet, annual lespedezas, vetch, wheat, soybeans, or sunflower. Leave these crops unharvested and located near suitable quail cover. One acre or more of such food for every 12 acres usually supports high quail populations.

Creating natural foods - Establish 1/4 acre or more of butterfly peas, lespedezas (annual, wild), milkpeas, partridge peas, tickclover (beggarlice), common ragweed, or Florida beggarweed.

Prescribe burning in late winter encourages butterfly peas, lespedezas (annual, wild), milkpeas, partridge peas, and tickclover. Light but thorough disking in late winter encourages annual lespedezas and partridge peas. Winter disking encourages common ragweed. Thorough disking between May 15 and June 1 in South Alabama, encourages Florida beggarweed.

The stands of natural quail foods must be good.

One acre or more of natural foods for every 12 acres usually supports high quail populations.



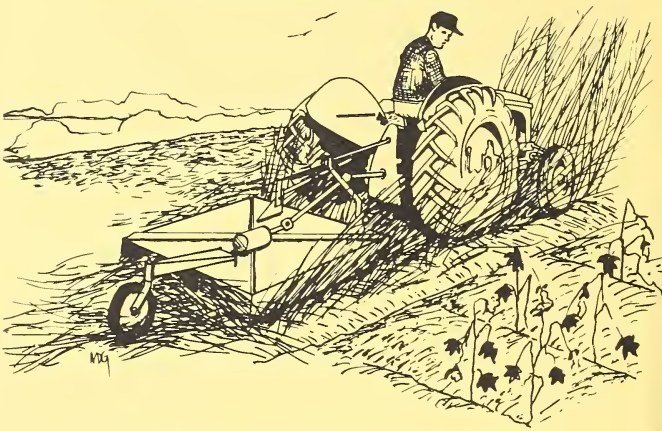
Corn -- a choice quail food

Maintaining Habitat

Cover - Protect from wildfire and overgrazing by livestock. Keep most of the cover open enough that quail can walk freely through it. Maintain woodland openings by periodic mowing, disking, burning, or other means. Restrict free-ranging cats and dogs.

Maintaining food plots - Protect from wildfire and grazing. Cultivate the first year if planted in rows. Cut bicolor off near the ground level in late winter following its second

growing season and apply 800 pounds of 8-8-8 fertilizer or its equivalent per acre. Cut and fertilize bicolor every 3 to 5 years thereafter.



Cutting bicolor with rotary mower

For successful reseeding, disk hard-seeded cowpeas in May every year. Prescribe burn Clanton tickclover in late winter at least every other year. Either disk or prescribe burn annual lespedezas, and partridge peas in late winter of every second or third year. Replant as needed.

Maintaining natural foods - Prescribe burn butterfly peas, lespedezas (annual, wild), milkpeas, partridge peas, and tickclover (beggarlice) in late winter. Disk annual lespedezas and partridge peas in late winter and common ragweed in mid-winter. Either disk Florida beggarweed lightly but thoroughly in late May; or if in row crops, "lay by" before June 1.

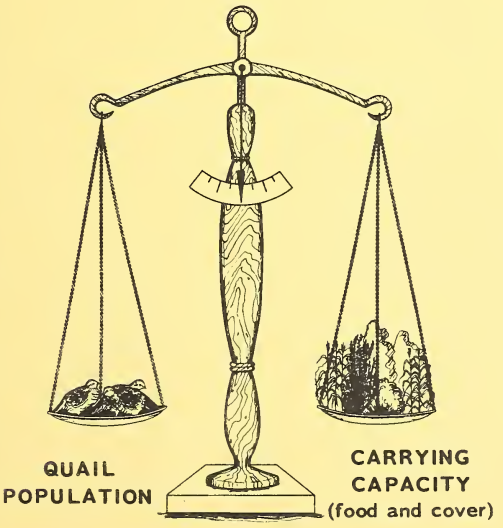
Phosphate fertilizer and lime are usually recommended for natural quail-food plants

CARRYING CAPACITY

The quail population on an area is determined by the area's carrying capacity or the quality, quantity, and distribution of cover and food. Populations vary somewhat from year to year, depending primarily upon reproductive success which is largely determined by spring and summer weather. Normal rainfall and cool temperatures during May through August favor high productivity. Unusually hot, dry spring and summer weather is detrimental. Areas with ideal habitat may support one bird per acre during the least favorable season (winter).

HARVESTING

It is difficult, if not impossible, to shoot too many quail during Alabama's legal hunting season, especially if high quality cover is available.



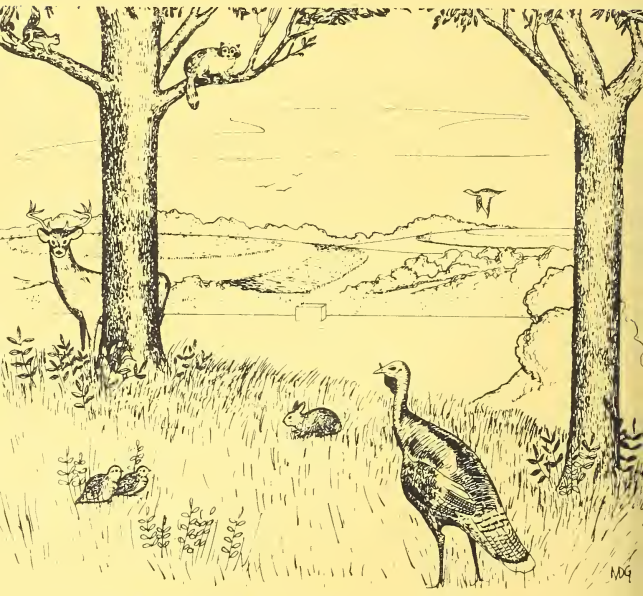
Carrying capacity determines quail population

FOR MORE INFORMATION

Trained personnel in the local office of the Soil Conservation Service can give you more information on land management or the bobwhite. These employees work through your local soil and water conservation district.

The Soil Conservation Service can also help you plan for more fish, doves, deer, wild turkey, ducks, and other valuable wildlife.

The local office of the Soil Conservation Service is listed in your telephone directory under U. S. Government, Department of Agriculture.



More wildlife -- the result of planning

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